





Digitized by the Internet Archive  
in 2013

<http://archive.org/details/ontariofishwildlv8n4onta>

*circulate*  
*F.H.*

Vol. 8, No. 4

# ONTARIO FISH AND WILDLIFE REVIEW

*[Handwritten signature]*

Winter, 1969



DEPARTMENT OF LANDS AND FORESTS

HON. RENE BRUNELLE, MINISTER

G.H.U. BAYLY, DEPUTY MINISTER



# ONTARIO FISH AND WILDLIFE REVIEW

Vol. 8, No. 4

Winter, 1969

CONTENTS	PAGE
The Snowmobile . . . Recreation or Ruination? <i>by E. H. Lucking</i>	3
The Puma in Ontario <i>by C. H. D. Clarke</i>	7
Cornwall Recreation Area Proves Popular <i>by G. E. Raine</i>	13
Ontario's Public Hunting Areas <i>by W. A. Creighton</i>	15

## THE COVER

The snarl and roar of winter, as Author Lucking puts it (Page 5), are caught in a tense, competitive moment through the courtesy of the Daily Press, Timmins. On the back cover is Ross Thomasson's example of what many of the zoom-and-zip crowd are after—the beauty of trackless snowscapes.

ONTARIO FISH AND WILDLIFE REVIEW is published four times per year by the Department of Lands and Forests (Fish and Wildlife Branch), Parliament Buildings, Toronto 182, Ontario. Permission to reprint material from this publication is hereby granted, provided due credit is given to the author and this magazine.

## Urbanization

About thirty years ago, it could be said that 70 per cent of the population of Ontario was rural and 30 per cent lived in cities and towns. Those living in the country tended to be closer to nature and have a more realistic, though not always scientific, understanding of their world. Even the town and city dwellers were not clearly cut off from the outdoor life since 'urban sprawl' had not even been invented.

The chairman of the board, of one of the largest financial houses in the country, once told me he attributed his success to the fact that he had never forgotten that he was originally a farm boy from Markham. We have an idea that he had some other attributes which contributed to his business success, but we have no doubt his realism about resources and people was firmly grounded in his early days in the country.

The cities have grown and like giant amoebas seem to be thrusting their formless legs, or pseudopods, experimentally in all directions and incidentally absorbing vital growth materials as they deposit their wastes in their surroundings. Seventy per cent of the people now live in the cities and larger towns. They have become urbanized.

Urbanized—what a horrible thought! The very name seems to contain the elements of de-humanization. It involves planning for the development of almost every square foot of land within the city boundary, certainly within the city core. People become cliff dwellers, living on the nth floor of a faceless high-rise. They go directly to their place of employment and frequently need not emerge until it is time to return by the shortest route to their respective caves. Their relationships with the natural world lie far behind—often forgotten, if indeed they were ever known.

City life is not all bad, however. Here we see many of the artistic aspects of human culture grow and flourish. The arts, drama and music are here; yet these in a sense are artificial things which must be balanced against a realistic understanding of the natural world if humanity is to reach its greatest fulfilment in health and happiness.

It must be remembered, too, that there are those in the city who are scarcely able to partake of cultural benefits in any sense. Attendance at the theatre is expensive; the natural world seems far away.

Or is it? It may be surprising to realize the size and variety of the wildlife population within a city like Metropolitan Toronto. Among the mammals which may be found are mink, muskrat, gray or black squirrel, skunk, raccoon, white-tailed deer, coyote, groundhog, cottontails, European hares, flying squirrels, bats and weasel. Game birds include ring-necked pheasants, Canada geese and many species of ducks, and song birds are too numerous to mention. Even the possibilities for fishing have not been completely destroyed by pollution of the several streams flowing through the city. One may catch pike at Toronto Island and bass in Grenadier Pond and dip smelts and suckers at the mouth of the Humber River.

To enjoy the out-of-doors fully is to understand in some measure the processes taking place, the needs of birds, mammals or fish, and the effect of urbanization on them. Some wildlife forms have actually increased to the point of being a nuisance within the city limits. Understanding gives greater enjoyment and a fuller life immediately and is important for the

future of mankind. Fish and wildlife managers should be receptive to the needs of people; perhaps their responsibility is to lead the urbanite gently back to a greater appreciation of natural and living things and to convey to him also that he must play a role to ensure the future welfare of our natural resources.

Not all wildlife, obviously, can do well under circumstances associated with intensive land use, and here the responsibility of citizens as a group comes into focus. Understanding of the environment is essential to the maintenance of natural values and to a greater cultural experience.

Thoreau said: "The mass of men lead lives of quiet desperation." Thoughtful management of our natural resources for people is an urgently needed prescription for the urbanization syndrome.



*A common crowd scene—many minds with but a single thought: snowmobiles. Other minds have thoughts on the protection of property and wildlife. Photo by H. A. McNeely.*



# THE SNOWMOBILE

## Recreation or Ruination?

by E. H. Lucking  
*Biologist, Kapuskasing Forest District*

*It's the great, big, broad land way up yonder,  
 It's the forests where silence has lease;  
 It's the beauty that thrills me with wonder,  
 It's the stillness that fills me with peace.*

. . . . . Robert Service

And these lines constitute one of the major indictments against the snowmobile. Like any other form of transportation, this machine is subject to many uses and abuses; and like the others, it applies its own set of pressures upon Man's aesthetic values and wildlife populations.

The original machines, made as early as 1927, were cumbersome, expensive, covered-in, custom-made vehicles, used mainly for the hauling of loads and supplies. That was the meaning of the word "snowmobile"—the winter workhorse.

A far cry from those prototypes were the products of some 30 years of evolution. In 1959, a Quebec firm manufactured 250 machines which were destined to become the new image of the snowmobile. A fast, manoeuvrable, open, two-man machine, resembling its remote ancestor only in the track for propulsion and the skis for steering, it snarled its way into winter life and recreation.

This new concept of the snowmobile enjoyed a relatively quiet popularity for the first few years after 1959. Relatively, we said. By 1964, there were an estimated 50,000 such machines in North America, and the demand was growing. Production could not keep up. In 1968, the largest Canadian manufacturer produced 85,000

units—which were not enough. Most popular competitors were in the same happy state. Now there are more than 100 North American manufacturers, and Japan has entered the market. The number of snowmobiles has shot upwards to an estimated one-million mark, and more than one-quarter-million units are being produced each year.

You can buy a snowmobile for \$800 (or less), but with more powerful machines and all the accessories, including reverse gear, cigarette lighters and sleds, plus the clothing and safety gear offered, your investment can easily reach \$2,000.

On the Ontario scene, there are more than 100,000 registered snowmobiles, and the numbers are climbing each year. A 1969 survey has shown:

- There are more snowmobiles than motorcycles registered in the Province,
- The number of snowmobiles is one quarter the number of motor boats in Ontario,
- Annual rate of increase for Ontario snowmobiles is 30,000, and for motor boats, 20,000.

The snowmobile has arrived! It has become a way of winter life with all of its uses and abuses. The workhorse of the 1920s is still being manufactured for the same old and some new jobs, and it is still expensive. The modern snowmobile is a more personal item, readily available to the individual and easy to operate and maintain.

Anyone who works out-of-doors in the winter now has a much easier means of

travel. Trappers and commercial fishermen can pursue their activities more efficiently, and they may operate larger units for increased income. Bush workers can reach operating areas more easily. Fish and wildlife managers can cover more space in less time, creating possibilities for winter studies of populations and habitat conditions.

But . . . the biggest impact is the release of the winter-bound. Winter is now not a time to be endured so much as a time of opportunity for a special form of recreation. The snowmobile has been described as the greatest boost for recreation since the motorized watercraft. The 1969 survey, mentioned above, states that 76 per cent are used for "general recreation", while 12 per cent are used primarily for hunting-fishing and the remaining 12 per cent for utility purposes alone. Hunters and fishermen can aspire to greater success through the opportunities for access to areas formerly out of reach. Winter picnicking, sight-seeing and afternoon excursions with the entire family now give television and curling some serious competition.

The tourist industry applauds this exploding sport. Formerly, winter was a time to close until next year. Tourist establishments can now sell gas, food and snowmobile supplies. Motels and hotels now welcome a new kind of tourist.

Yes, the snowmobile has very definite, legitimate uses.

Sadly, the abuses are just as obvious. Unfortunately, sufficient areas are not available to meet the demands of this mushrooming sport, particularly in the crowded south of our Province. The week-end excursionist needs running room. Government areas are extremely overcrowded. Private landowners charge fees which may seem expensive to some snowmobilers (up to \$5.00 for entry, plus \$3.00 per hour for trail use). Trespass is the resultant abuse, and posting is the land-owners' response.

The snow-covered golf course is a prime target for trespassing snowmobilers. The zoom-and-zip intrusions are sadly in evidence to golfers during the following spring and summer. The packing action of snow-



*A fish hut on Lake Simcoe, two snowmobiles of a common type, and a Lands and Forests "workhorse" on a tour of inspection. Photo by D. P. Brook.*





*Where silence has lost its lease. Photo, courtesy of The Daily Press, Timmins.*

mobiles lets winter frost penetrate more deeply into the turf on greens and fairways, retarding or even preventing further growth. Too, the paths are later in melting and disappearing.

The same may well apply to a farmer's winter wheat.

Tree nurseries and new plantations are invitingly wide and flat, and the coursing of snowmobiles can easily break off the tops of young seedlings. This is not only costly in terms of time and money, but in the set-back to reforestation programs and in sheer frustration to those who take pride in the growing of trees.

Ski trails and areas suffer too from snowmobiles drifting where they have no right to be. As well as being extremely dangerous, machine presence in such situations is a direct infringement on the sport and enjoyment of others who wish to enjoy an out-of-doors winter.

The aesthetic value of quiet is also something to be reckoned with. The snarl and roar of the snowmobile is an accusation all its own. The escape from our mechanized

world into Robert Service's "forests where silence has lease" becomes more difficult with each succeeding winter. Even the city-dweller, so well accustomed to the rumble of traffic, gnashes his teeth at the whine-roar of snowmobiles, which are often out after dark to avoid the same rumbling traffic.

In well-used areas, litter can be an eyesore. Empty cans, bottles and wrappers should be carried home. The long-distance, short-time concept of snowmobile travel has a taste of adventure in itself, whether on an established trail or breaking a new one. A small pile of garbage strewn across the trail is a disgusting jolt—a shattering reminder of how thoughtless and self-centred the individual man can be.

Hunting, too, suffers its abuses. Indiscriminant trespass by snowmobilers has resulted in the posting of some lands to *all*, including the fall hunter. In Ontario, there have been documented examples of sadistic hunting in which animals have been shot or run under the tracks, and left where they lie. Intentional harrassment of animals can have

disastrous effects. Winter is a hardship, even at the best of times. Disturbances in favoured winter locations can cause undue stress or force wildlife into unfavourable circumstances often resulting in death.

The possibilities for illegal hunting have increased, due mainly to the snowmobile's ability to go almost anywhere. Hunting out of season, or in co-operation with spotting aircraft, is not only illegal but unsporting in the unfair advantage which the hunter gains over his quarry.

The possible effects of machines on wildlife populations and the exuberance of pursuit, even though legal at the time, have affected hours and dates of seasons. Minnesota, during deer season, allows no snowmobiles in deer zones between 0700 and 1500 hours except while making or breaking camp. Ontario has shortened the moose season by three weeks, but still leaves one to two weeks for the snow hunter. The State of Washington has changed the status of the cougar (puma) from a bountied to a game animal, with the season closed during the winter months, due to the danger imposed by snowmobile mobility.

The effects of the snowmobile on hunting and wildlife are much more evident and more publicized than those on fishing. Lakes, which are remote at other times of the year, are being highly exploited in the winter due to easy access by snowmobile. Will winter fishing have to be closed on some of these lakes to maintain any fishery at all?

The sudden realization of the recreational potential which the snowmobile offers must also carry a realization of its limitations. The popularity boom has carried the snowmobile on the crest of a wave of enthusiasm. This wave is in some danger of breaking in the shallows of intelligence shown by some operators. Reaction to the excesses and abuses perpetrated with these machines has set in.

As you can see, regulations should be imposed in an effort to control the excesses of snowmobile popularity. Unfortunately,

enforcement agencies will always be at a disadvantage in exercising control. The numbers of machines, and the areas in which they may travel, are overwhelming. Enforcement cannot take the field in a one-to-one control effort.

Although legislation is a shield to protect the public from the irresponsible, it can also protect the snowmobiler. Desirable regulations, governing the when and where of snowmobile use, should also provide adequate Crown land areas where they may be used.

Another way in which the snowmobiler can be protected is in the setting of safety standards for the machines, themselves. Legislation should be as uniform as possible with that of neighboring States and Provinces. This would help to avoid a spill-over of deficient machines into regulated areas.

The snow machine, unhappily, is a victim of its own success. Its popular history is too short and vivid. It has had no time to iron out its abuses in a self-regulatory way. It is an upstart with no tradition, and it is often viewed with alarm and misgivings.

The opponents are vehement in their damning of snowmobiles. Its proponents, who wish a harmless form of winter recreation for themselves and their families, who have need for the mobility and speed offered, and who find a release from winter tedium, are equally adamant that the machine is a form of salvation.

Legislation and enforcement can only do so much to regulate the careless and apathetic. The snowmobile is a tool, a means of transportation. Its use for the maximum enjoyment of its owner must rest on his responsibility and knowledge of the ways in which the machine can infringe upon the enjoyment and desires of others.

It is a worn cliché, but the snowmobile may be in need of tolerance and understanding from both sides. And both sides have the responsibility to examine the other's point of view.

## THE PUMA IN ONTARIO

by C. H. D. Clarke  
*Chief, Fish and Wildlife Branch*

Every continent, and in fact every major region of the earth except Australia and the polar regions, has its large cat. Ours was a fawn-coloured beast six or seven feet from the nose to the tip of its tail, weighing 100 to 150 pounds when adult. It had black marks on its face that gave it a quizzical expression even at rest, but its most distinguishing feature was a tail that was almost grotesquely long. It climbed trees and screeched.

Today we associate this animal with the mountains of the west. However, before the days of modern printing and the Life library, the authority on nature in many a household, certainly in the one in which I grew up, was a book called "Wood's Natural History" that was supposed to have everything in it. There was our beast, dignified by a large illustration under the name "puma", and said to inhabit the whole western world from Canada to Patagonia. If you read a little closer, you found that Canada meant Ontario and Quebec. Furthermore, most of the stories about the beast referred to New York and Pennsylvania. The people there, we were told, called it "panther", "painter", or "catamount."

We practically never think of such a beast in Ontario now, but the old folks of two generations ago remember it. It was abundant enough in New York and Pennsylvania where bounties were paid, a grand total of 99 in 23 years in New York. It was never common enough here to have a price on its head, and early records are confused by dramatic nonsense about nocturnal cries and screeches. The puma has a sort of caterwaul that does not carry very

far and is emitted only on social occasions. It also has a bawl that carries a little farther and could be mistaken for a human call.

In my experience, most of the weird noises heard from time to time in the bush at night come from the Great Horned Owl. Most of the time this bird just says "who who" but every once and a while, at any season, it cuts loose with real hair-raisers. If the finding of a puma depended on hearing it, you might have a long, long wait.

Some confusion also arose out of names. The names "Indian devil" and "enfant du diable" could also mean wolverine or even skunk. Also, "panther" could mean lynx, as it does now in the Gaelic of Cape Breton (paindel), or even bobcat. There is also a matter of description. A good example is in Podmore's "Sporting Paradise" where a nocturnal encounter in Muskoka is described, that should have been a puma, but could have been a lynx or a bobcat. The fact that the author had a good look at the animal and did not describe it is exasperating.

The earliest navigators to the east coast of North America mentioned that the Indians had "lion" skins, and the Hispano-Americans have always called it "leon." The name "mountain lion" is not a bad one except that it is a bush lion and a swamp lion as well. The name "cougar" is a bookish word used by a man (Kerr) who gave the Eastern puma a scientific name as if it were a different species. *Felis concolor* is its proper name.

"Cougar" is actually a corrupt form of the Brazilian Indian name for the jaguar for which, on a Spanish tongue, the word "jaguar" is a close approximation, and





*A western puma, female, a year and a half old. Photo by E. W. Gorsline.*

should never have been applied to the puma. I think we are best off to use the name, puma, which comes from the Incas of Peru to whom it was sacred. The word "*concolor*" incidentally means "uniformly coloured" but in spite of it the kittens are spotted.

Because of uncertainties of name and description, it was never recorded properly in Ontario until the settlers came. In 1894, the old records were brought together, along with some rather fanciful stuff, in "The Biological Review of Ontario." Something similar was done by Ernest Thompson Seton and others. We learn that Charles Fothergill, the pioneer naturalist, had a specimen in his museum in Toronto, destroyed by fire shortly after his death. It was killed in Scarborough Township around 1820. It measured 6 feet, 10 inches, of which the tail

was 2 feet, 3 inches. It is evident from Fothergill's diary that several, probably skins, were exhibited at some kind of show or fair in Whitby in 1835.

These old accounts list animals killed, and observations for a scattering of places—Baldwin's hill, near Yonge Street, now in Toronto; in the woods near Dundas and Yonge; near Thornhill; in Whitchurch, Markham and Uxbridge; near Cobourg, in Peterborough County, in Leeds County, in Malahide Township; and in Fingal, Lambeth, Middleton Township, Wentworth County and St. Catharines.

If there were several skins available at a given time for a show in Whitby, one can only assume that something similar could have been set up elsewhere, and in fact that it was well-distributed, if rather scarce, when Ontario was settled. I feel sure that if



*The puma is no pussy cat. Photo by E. W. Gorsline.*

anyone searched the files of the old Toronto "Globe" in the Toronto Public Library he would find references.

The eastern puma was the smallest of its kind. It is interesting that most farmers were sufficiently impressed by a cat six feet long that they did not exaggerate. However, W. P. Lett of Ottawa, who wrote in the first volume of the "Ottawa Naturalist" not too long after Confederation, and incidentally says that the "cougar" "abounded at one time in the valley of the Ottawa in considerable numbers," refers to a specimen shot near Farran's Point on the St. Lawrence as seven and a half feet long. It is still extant in poor shape, and I question that it even went six feet. It was killed, incidentally, on U.S. soil, so it is a New York specimen. It looks very puny alongside an Alberta lion, and one feels that few indeed were the eastern animals

that went 100 pounds. Most of them would be short of full size, little more than twice the weight of a big bobcat. Thus Charles G. D. Roberts' story, "They do seek their meat from God," about a child being rescued from a puma in New Brunswick, which used to be in the school Reader, is pure fancy like newspaper accounts of people being menaced by eagles.

Nevertheless, the most recent dated killing of a puma in Ontario, from the Evening Telegram of January 4, 1884, describes one killed by T. W. White of Creemore as "measuring nine feet from tip to tip." Even in Alberta, that would be stretching things. One assumes an eyeball measurement, like 18-pound European hares.

Rev. John Doel, a famous early naturalist, mentions the Malahide animal as having been



reported in the "Globe" about four years before 1894, which might make it the latest of his records of beasts killed, as recorded in the Biological Review.

I once thought that the Dundas-and-Yonge beast may have lurked in some of our Queen's Park oaks, until I found that none of them went back much beyond 1870. It may have scratched the hole in which an acorn germinated, however.

The animal left its mark on the geography of Ontario, but not in the easily identifiable way it has in the eastern states where there are "Panther Runs" and "Panther Mountains" all over the place. It was the totem of an Iroquoian tribe in Ohio, with its name Frenchified as "Erie." The same name, in another form from another tribe, the Hurons, is part of the word "Garafraxa," which was applied to the "Queen's Bush," the great cedar swamp that once occupied the high land of south-western Ontario. That makes sense because the cedar swamp was a wintering ground for very many deer. What about Lac des Chats? This could also have been from "chat cervier", the bobcat, or "chat sauvage", the raccoon, both common French-Canadian names.

The Cree-Ojibway name is Michipeshew, Ketchepeshew, or other variant spellings, and simply means "big lynx." For these people, who came from the north, it means that they met a strange beast when they went south and named it as best they could. They called the wild turkey "big ruffed grouse" in the same way. Now there is a Mishibishu lake in the Puckasaw, which is very interesting, but the northern limit of pumas in pioneer days was also the northern limit of deer, and in the whole of the new world, though it will eat anything, its economy is apparently based either on deer or deer-sized animals, or pigs and pig-like animals. Furthermore, the "big lynx" has entered into Indian lore as a mythical sort of beast, even though there is such a thing, and it is hard to know what to believe. It would require more than casual observation to

bring credence to a report from an area where there were no deer.

This brings us to the fact that since 1890 scarcely a year has gone by without a "panther" report from Ontario. The same is true for New York where the animal has been written off as extinct since 1894; for Pennsylvania where the date was earlier; and for other states as well as New Brunswick where, according to simon-pure zoologists and despite Dr. Roberts, there were said to be no "authentic" records. In recent years, the number of reports has increased. Finally, Bruce Wright of New Brunswick has accumulated proof and published a book, "The Ghost of North America."

My own interest has been rather casual. Over 20 years ago the U.S. National Park Service, in an annual review of park fauna, listed pumas for Shenandoah in Virginia. I asked them if this was not a printer's error and they said it was not. At that time I used to see Dr. Alexander Wetmore, Secretary of the Smithsonian Institution, surely a reputable observer, on Arctic Institute business. Knowing that he had a camp in the mountains not too far from Washington, I asked him if there were any pumas. He said: "Right behind my cottage." Later I heard of a scattering of other records in the United States and realized that they, like us, had had reports all along.

Wright turned up specimen evidence—a photograph from New Brunswick, an actual specimen from Maine, and there are others from the eastern States. Most of the time the evidence has been plaster casts of tracks. Such, identified and confirmed, are now available for Minnesota and Manitoba. These, plus actual skins farther east, have us fairly surrounded, but we have no proof yet of living pumas here—proof positive that is, rather than hearsay.

We have had a parade of reports, every year. Of these, two, both by members of our own staff, have carried circumstantial details that the men in question had no way of knowing from books, but which were





*Male puma, aged 1½ years, Roosevelt National Forest. Photo by E. W. Gorsline.*



*Puma with mule deer, the chief prey in Colorado. Photo by E. W. Gorsline.*

absolutely diagnostic. Four more, in which I personally had a chance to ask searching questions, I also believe. One was from one of our own staff. Two were persons who, like myself, knew the animal's ways from the west. A footprint can be captured by putting plaster in a fresh impression. One recent non-resident hunter missed a perfect opportunity to get confirmation because there was dung that he could easily have put in a lunch wrapper and sent to us. Cats groom themselves all the time, and in with the hair of their prey there are always some of their own hairs. The scale pattern is diagnostic.

Among the dozens of additional reports, some may have been authentic. Some were not. One was seen and found to be a lynx. One footprint sent in to us had distinct claw marks. Cats have retractile claws. The less said about the authenticity of some reports, the better.

We want proof of our cats, but we do not want one killed. To kill anything so rare would be shameful, but at the same time it is hard to protect a creature whose existence is hypothetical. One may have been killed in 1908. In that year Ward's Natural Science Establishment, of Rochester, N.Y., bought a puma specimen in Ontario. There are no more details. As soon as we have proof that the puma exists here now, we can make an appropriate recommendation for protection.

There certainly is no harm to be expected from an animal that was obviously so rare even in the 17th century that it escaped the notice of the French missionaries. It can hardly pose a threat to deer. Recent studies in Idaho have shown that it will prey on wolves at a den, which should recommend it in some quarters. Depredations on live stock have been nil in recent years.

In the snow its footprints are hard to distinguish from those of a lynx. Size and shape of paw, and stride, are similar, and both are cats. The lynx has huge feet and grotesquely long legs for its body size. The puma sinks in a little deeper, and every once

in a while its tail whips the snow to one side of its track. It also travels straight from here to there, whereas the lynx runs around in circles on rabbit runways.

Our puma is small. It is also reddish, compared to the tawny grey Alberta cats. It covers its kills which bear and wolf are unlikely to do. There is an old story of a drunken British soldier, on the upper Ohio in the days of the Seven Years' War, who fell asleep in the bush and woke up to find himself buried in brush and leaf litter. If you find signs so fresh that the animal must be near, you could do like one of the western park wardens—run around, yapping like a dog. The cat, which was near, jumped up into a tree. In our bush it is out of the question to follow hounds very far, as would-be bear hunters have found.

Maybe we should have a sweepstake on who can produce the first proof. The place to look is in the deer range—eastern or western. The puma never made it with moose and caribou, in spite of Mishibishu.

There is a final touch of authenticity afforded by the known capacity of big cats to persist at very low densities. Leopards, for example, are scarce in many places and suffering because of the trade in spotted cats, but there are still some in almost all parts of the original range, even in places like Palestine. In the sheep country of the Cape Province of South Africa, they have been ruthlessly and relentlessly destroyed by every means known to man since the 17th century, yet there are still some. One was killed a couple of years ago at Jonkershoek, not far from Cape Town, in the longest-settled area of all.

Some of this capacity to survive may have rubbed off on the puma. There were never all that many killed in Ontario. What happened was, that when settlement came the habitat was destroyed, but it may have been able to follow the deer a little farther north than either had ever lived before. There it still is—we think.



## CORNWALL RECREATION AREA PROVES POPULAR

*by G. E. Raine*

*Fisheries Biologist, Kemptville Forest District*

In 1968 with the opening of the Cornwall recreation area and its put-and-take brook trout fishing pond, trout fishing in Kemptville Forest District took on a new dimension. Previously, a lack of suitable trout waters in this District, especially in the extreme eastern portion, has meant that local trout anglers have had to travel a considerable distance to pursue their sport. To improve this situation, the Department of Lands and Forests focused its attention

on a 14-acre quarry located in a 200-acre parcel of Crown land near Cornwall.

The site was originally cleared for settlement in the late 1700s or early 1800s, and it was farmed until acquired by the Ontario Hydro Commission in 1952. Quarry material was removed during the mid-1950s for construction of the Robert H. Saunders Dam and an associated dike at Cornwall.

With the completion of the St. Lawrence Seaway, the 65-foot-deep quarry was aban-



*Aerial view of Cornwall Recreation Area. Photo by G. E. Raine.*



doned, and it eventually filled with water. Physical, chemical and biological conditions were found to be satisfactory for the establishment of a brook trout fishery on a put-and-take basis. In 1967, the Department of Lands and Forests acquired the land for management as a multiple-use recreation area.

Netting operations revealed that northern pike, maskinonge and at least twelve other fish species had managed to gain access to the quarry during spring freshets from the nearby Raisin River. To eliminate fish species incompatible with brook trout, the water was treated during October of 1967 with 210 gallons (0.75 ppm) of pro-noxfish fish eradicator. With a fire pump, half the chemical was sprayed over the water surface, and the remainder was injected to the 40-foot level to ensure that a complete eradication was accomplished.

To prevent re-entry of competing fish, both the seasonal inlet and outlet drainage ditches were blocked, and the water course re-routed. In addition, legislation was passed to prohibit the use of live bait fish, another possible source of entry for undesirable fish species. A creel limit of five fish/angler/day was imposed to provide for a more equitable distribution of fish among anglers. Another step taken to improve the quality of the fishing was to prohibit the use of power boats.

Before the stocking program commenced, a precautionary bio-assay was undertaken in mid-April of 1968. This involved lowering three wire cages, each containing 10 trout, to the five-, thirty-, and fifty-five foot levels for a period of three days. All of the trout survived, thus indicating the eradicator had reached a non-lethal level. Also, a second gill net study was conducted. Since no fish were netted, or observed in the shallows, the reclamation program appeared to be a success. The stocking program could now begin.

On April 25 and 26, 1968, 3,000 yearling brook trout, about 8" long, were planted in preparation for the official opening on Sat-

urday, April 27, a day that saw some 400 anglers and many more observers visit the recreation area. Four additional plantings during the summer months boosted the total stocking to 8,000 trout and maintained a favourable uniform catch per unit of effort.

To assist in assessment of the stocking program, a creel census was conducted. This provided estimates which indicated that from the opening date to the closing of the brook trout season (September 30), approximately 5,500 angler visits had resulted in 9,700 hours of fishing and a catch of 4,200 trout.

After the closing of the brook trout season, a sufficient number of trout remained for winter fishing. Anglers were quick to realize the potential and took advantage of the new opportunity when the winter season opened on January 1. Creel census over the winter season, ending on March 31, indicated that 1,600 trout had been caught in 2,000 hours of fishing during 500 angler visits.

Over 6,000 angler visits to this small trout pond proved the popularity of this project. However, a put-and-take fishery such as this does involve management problems. The Department plans to continue the stocking program for further assessment.

The fishery is but one potential use of the Cornwall Recreation Area. The future holds promise for the development of picnic areas, hiking trails, and habitat for birds and mammals. To develop the site to its maximum potential, a committee consisting of members from the various branches within the Department has been formed to recommend sound management practices.

*Editors' Note: Limestone is valuable not only as a building material but also for the holes its excavation leaves behind. Such are the situations that biologists capitalize on to provide recreation for anglers and other outdoor users. A good biologist is one who knows a potential fishery from a hole in the ground.*

# ONTARIO'S PUBLIC HUNTING AREAS

by W. A. Creighton

*Provincial Hunting Area Biologist, Game Management Sub-Section*

*(Photos by the Author)*

Problems involved in supplying hunting opportunities in southern Ontario are growing larger with each passing day. No longer is it possible, as in past decades, for the hunter to hop over the back fence for a morning hunt. Cities have spread out over good wildlife habitat. Posting of private lands near metropolitan areas compels the hunter to spend more time searching for a suitable area than he does in pursuit of game.

This dilemma has resulted in a program, initiated in 1962, of establishing public hunting grounds. To offset the loss of hunting opportunities and wildlife habitat, the Department of Lands and Forests has been acquiring lands and has established a system of intensive wildlife management on these areas throughout southern Ontario.

What do we hope to accomplish with wildlife management areas? For future generations of Ontario residents, these lands will be significant remnants of wild country remaining in public ownership. At present, they are being "farmed" to produce bumper crops of wildlife and provide good hunting opportunities. In addition, such managed wildlife areas permit people to enjoy, and gain a sense of value for, wildlife and its environment.

A quality hunting experience is the chief aim of the Provincial Hunting Area program. Perhaps, to each individual hunter, a quality hunt has a different meaning. It can be a totally personal experience, but opinions are bound to differ. To our way of thinking, a quality hunt should entail wary game in a natural, wild environment. Game on provincial hunting areas must present a hunting

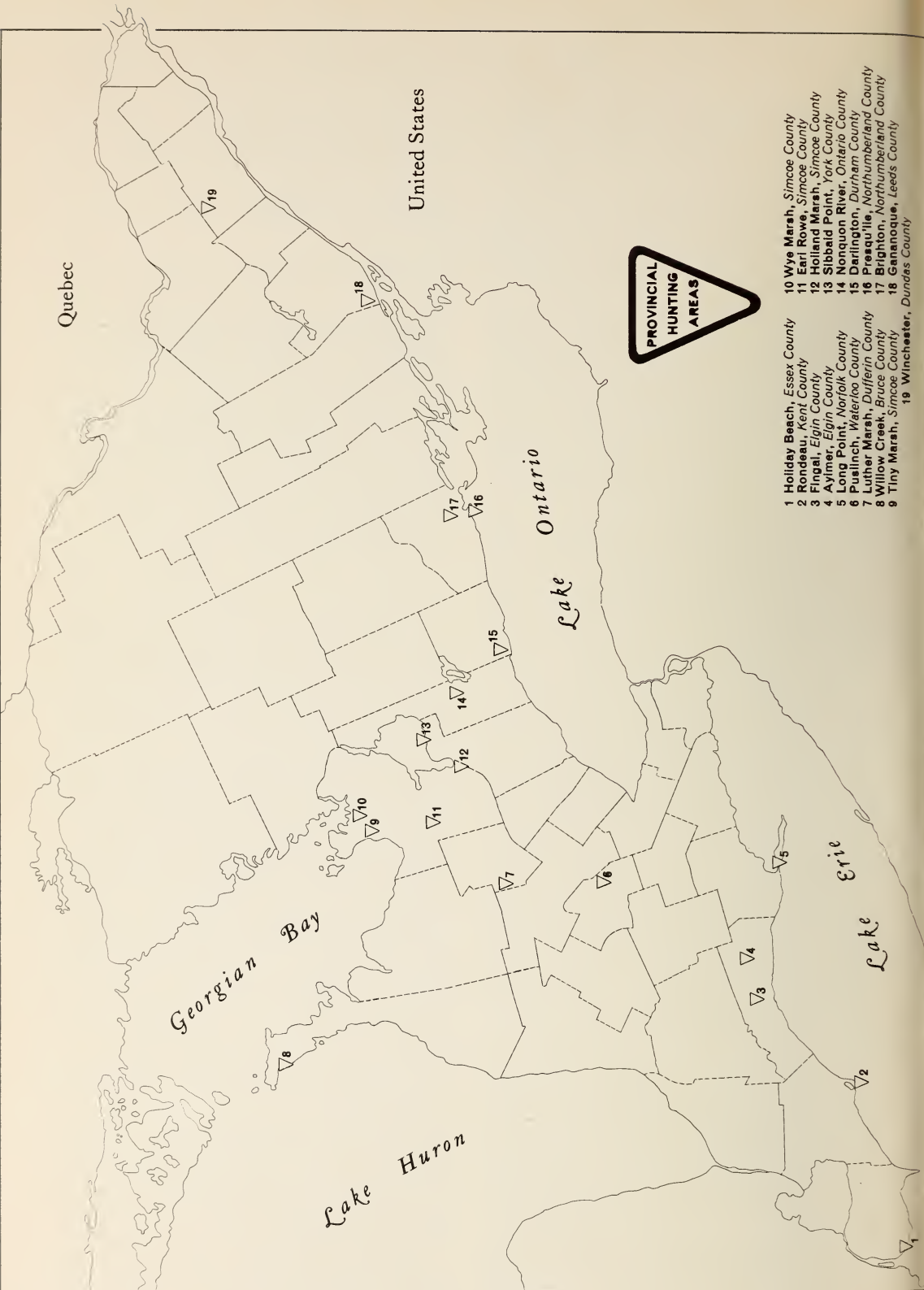
challenge to the sportsman rather than be a mere target in a shooting gallery or meat for the pot.

If the object of hunting is to develop shooting skill, better and cheaper opportunities are available at a trap or skeet club. If the significance of the kill is to score, then this satisfaction can also be obtained at a gun club. But hunting can be much more. To the truly initiated, the killing of game is only the climax to a ritual of anticipation and preparation begun months before. The highest development of the hunt and greatest gratification comes when the hunter is aware of the whole ecological complex and of his part in it. In other words, the real hunter knows his game.

The hunting experience deteriorates when there is competition for the game. The best way to perpetuate hunting quality, when the demand for hunting is high and the places to hunt are few, is to limit the gun pressure. This limit will only be required on Provincial Hunting Areas when the quality of the hunt deteriorates below one unit of game per hunter per day, or when the number of hunters is too great for their own safety. The hunter must realize that small bags of game taken under sporting conditions provide more enjoyment than stuffing the bag without constraint.

The quality of hunting is also improved by encouraging the genuine hunter, rather than the casual chap, and by making hunting a bit more rugged through the removal of frills and restriction of boats and facilities.

Although the primary goal of the Provincial Hunting Area program is to provide a







*Autumn olive hedgerow planted for travel and cover. The grass was cut one rotary blade wide to provide food for cottontails. The field is nesting cover.*

place to hunt and to manage these lands to their full capacity to produce a variety of wildlife species, alternate uses which do not interfere with these goals are also developed. Such pursuits as wildlife photography, bird watching, dog field trials, trap shooting, rifle target practice, fishing, duck hunter tournaments and decoy contests, and mushroom, berry and nut picking are encouraged.

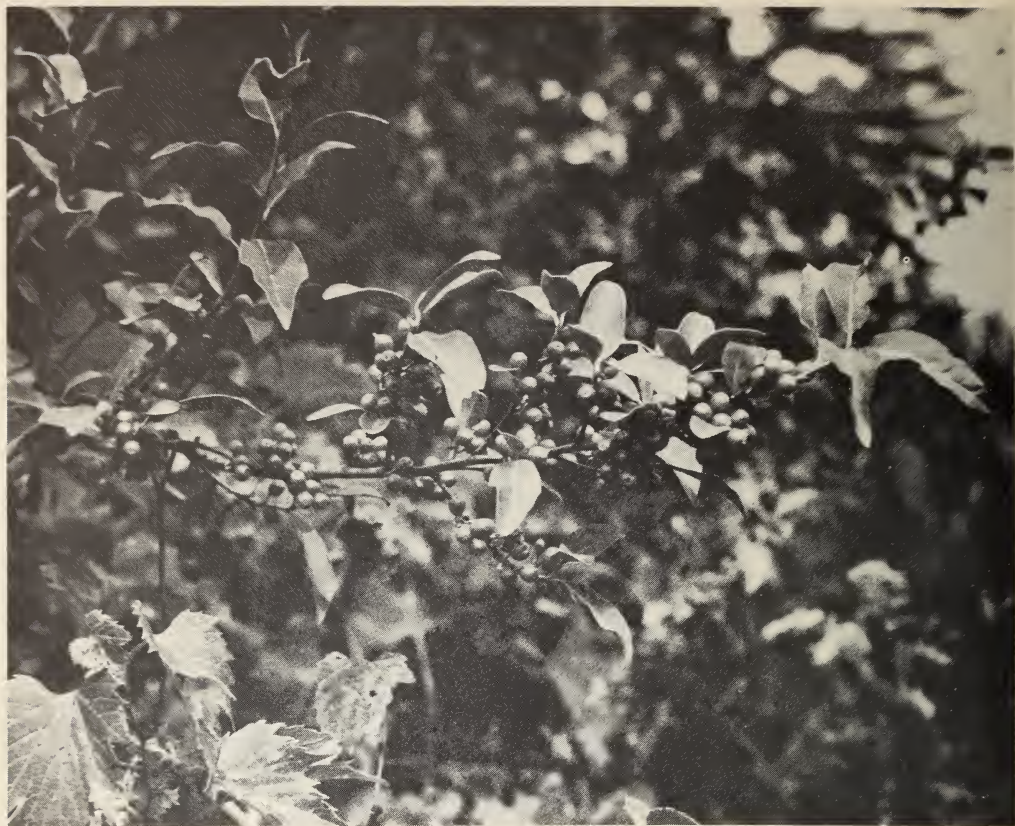
There are nineteen wildlife management areas, totalling more than 33,000 acres, located across southern Ontario. These wildlife lands are being managed for game species such as ruffed grouse, bobwhite quail, pheasant, ducks, geese, cottontail rabbits and European hare. In some areas, there is a limited stocking program of pen-reared pheasants.

The priority in the management of these areas is to provide wildlife requirements of

food and cover. Plans for each Provincial Hunting Area include development of winter cover, nesting cover, escape cover and feeding areas. Water areas are being created and developed for waterfowl and furbearers such as mink and muskrat. The production and harvest of wildlife is improved by the use of strip-planting of vegetative cover and mowing of lanes through dense vegetation.

Many wildlife management practices designed by this Department will be carried out with the assistance of adjacent landowners through share-crop or direct-payment programs. Under these agreements, part of the food crop close to cover will be left standing to provide winter feed for wildlife. Finally, Provincial Hunting Areas are marked with specially designed signs.

Controlled waterfowl shooting units were established in the early 1960s to manage



*Autumn olive, one of the shrubs planted for food and cover. Berry crops are heavy and dependable and remain on the branches until late winter.*

marshes and waterfowl for quality hunting. Hunter competition on many marshes had reduced the quality of the hunt, increased the danger of shooting accidents, and reduced the bag to zero in many cases.

A controlled hunt signifies that techniques to manage the resource and its users are being employed. Water-level control structures, refuges, feeding sanctuaries, controlled shooting zones (Zone A), peripheral hunting zones (Zone B), limited shooting hours, alternate shooting days, and limited numbers of hunters are methods employed to manage a marsh for waterfowl and waterfowl shooting.

Refuges and feeding sanctuaries are areas set aside in the marsh, allowing waterfowl to rest and feed without being disturbed. Where food and sanctuary are provided, ducks will

be held on the marsh much longer than they would normally stay.

Further encouragement for waterfowl to stick around a little longer is achieved by limiting hunting to three or four alternate days during the week.

The controlled shooting zone (Zone A), where the number of hunters is limited and they are allowed to shoot only from blinds supplied by the Department, is located between the refuge and the feeding sanctuary. This strategic layout is important for providing daily flights of ducks across the shooting zones.

The Zone B shooting areas, where the numbers of hunters are not restricted and their blind locations are not determined, are located on the periphery of the management area. A daily fee is charged for hunting from





*Brushpile for cottontails, Fingal Provincial Hunting Area.*



*Speaking of game production, here's a two-week-old jackrabbit.*





*Dog field trials are held in Provincial Hunting Areas.*

a blind in the controlled shooting zone, and a season permit is available for the Zone B shooting areas.

Future plans call for the purchase and development of large wetland-upland game management complexes. These areas will be managed intensively to produce maximum waterfowl and upland game crops. Hunter regimentation will be held to a minimum, and a user fee will not be charged until it is essential for public safety and quality hunting. The early stages of this development may be seen at Luther, Wye, Tiny and Holland marshes, and Nonquon River, Gananoque and Winchester Provincial Hunting Areas.

In the vicinity of these larger game units, it is planned to purchase small satellite areas

that can be made attractive to wildlife through minor changes in the environment. The Puslinch Tract and Brighton Provincial Hunting Area fall into this category.

Another approach to game land management is being developed to demonstrate the compatibility of agricultural and wildlife land use. A program of share-cropping corn in conjunction with wildlife habitat improvement on the former Fingal and Aylmer Airports is under way.

With the development of this program, we have the opportunity to create areas where wild creatures may thrive in abundance and the hunter may feel free to hunt in season. The nature-lover will also find a place to observe and enjoy wildlife at his leisure.



*Food and cover aplenty for waterfowl, Tiny Marsh Provincial Hunting Area.*









